

REMARKS

Claims 10-14 are amended to recite a computer readable medium including computer programs operative to generate the recited data structure. No new matter is added.

The Examiner objected to the drawings as failing to show every feature of the invention specified in the claims, identifying claims 1-9 and 15-16. However, the Examiner did not specify what features are not shown in the drawings. Claim 1 recites a method of synopsizing large data sets, including four method steps. Figure 6 is a flow diagram of a method of synopsizing large data sets having four blocks, each corresponding directly with a method step recited in claim 1. Claim 15 recites a computer readable medium including computer programs operative to perform the same method steps as recited in claim 1. Figure 1 depicts a CD 24, a fixed disk drive 20, and memory 14, all of which are computer readable media which may contain the claimed computer programs.

The Examiner rejected claim 11 under 35 USC § 112, asserting that neither the specification nor the drawings indicate a flag attribute indicating whether or not to output a large data set. Paragraph 0019 states, "The synopsis container may additionally contain additional elements, such as a flag indicating whether or not the large data set is to be displayed." Paragraph 0021 states, "A flag, such as the READ_CHILDREN attribute 82 may be assigned a value indicating whether or not the accompanying large data set items are to be displayed." The READ_CHILDREN flag 82 is depicted in Figure 4, where it is assigned a value of "false." Accordingly, a flag attribute indicating whether or not to output a large data set is fully supported by the specification and drawings as filed, and the § 112 rejection must be withdrawn.

The Examiner rejected claims 10-14 under 35 USC § 101 as being directed to a program *per se*. Claims 10-14 are amended herein to recite a computer readable medium including computer programs operative to generate a data structure having the claimed limitations.

Accordingly, these claims recite statutory subject matter, and the § 101 rejections must be withdrawn.

The Examiner rejected claims 1-8 and 10-15 under 35 USC § 103 as being unpatentable over U.S. Patent Number 6,643,629 to Ramaswamy in combination with U.S. Patent Number 6,470,381 to De Boor. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references when combined must teach or suggest all the claim limitations. MPEP § 2143. The combination of Ramaswamy and De Boor fails to teach or suggest all limitations of the rejected claims.

Ramaswamy discloses a method for identifying "outliers" in large data sets. Outliers are particular data points in a data set that are dissimilar from the remaining points in the set, col. 1, lines 12-13. For example, outliers in the form of abnormal usage patterns for a credit card, in a data set comprising normal transactions using the card, may be used to detect a stolen card. col. 1, lines 17-18. Ramaswamy ranks outliers in relation to their neighboring points, and employs a partition-based detection algorithm to partition the data set. The partitions that cannot contain a predetermined number of outliers of interest are eliminated from consideration, reducing the complexity of the computationally intensive task of identifying outliers. col. 1, lines 39-54.

The Examiner asserted that Ramaswamy discloses a method of synopsizing large data sets to facilitate the use of an accessibility system, and in particular, "Ramaswamy teaches the claimed, generating a synopsis of said large data set." A synopsis is defined as, "A brief outline or general view, as of a subject or written work; an abstract or a summary," (American Heritage, via *answers.com*). This comports with Applicants' definition in the specification at paragraph

0019, "The synopsis container additionally contains a summary or synopsis of the large data set." A summary is "A presentation of the substance of a body of material in a condensed form or by reducing it to its main points," (*Id.*). Ramaswamy does not disclose providing any summary of a large data set. Quite the opposite – Ramaswamy provides a collection of outliers that are, by definition, dissimilar from the data set (Ramaswamy, col. 1, lines 12-13). Ramaswamy's collection of outliers is not a summary or synopsis of the underlying data set; it is a collection of anomalies – a summary of what the data set is not like. For at least the reason that Ramaswamy fails to teach or suggest generating a synopsis of a large data set, the § 103 rejections of claims 1, 10, and 15 must be withdrawn.

De Boor discloses a wireless communication device having a user interface comprising a browser interpreting HTML and extensions to HTML. The interface allows the user to access the Internet and World Wide Web, as well as telecommunications functions such as dialing, text messaging, in the like. De Boor does not disclose or suggest any accessibility functionality, such as a screen reader.

The Examiner stated, "De Boor teaches the claimed, formatting said synopsis of said large data set in a synopsis container that includes said large data set and a synopsis of said large data set," citing to Figure 1 and col. 17, lines 14-15. Figure 1 depicts "an illustration of the system and software architecture of a wireless communication device 100 using the markup language based MMI [Man-Machine-Interface] 102 in accordance with the present invention." col. 8, lines 30-33. Figure 1 depicts cell phone hardware at the lowest level, with a real-time operating system over the hardware, and a user interface (MMI) layered over that. Nothing in Figure 1 or its description in De Boor's specification discloses or suggests any large data set, any synopsis of a large data set, or any synopsis container including the large data set and the synopsis thereof. Furthermore, the Examiner previously cited Ramaswamy as disclosing generating a synopsis of a large data set. Accordingly, to teach or suggest the claimed

limitations, De Boor would have to disclose a synopsis container including a synopsis of Ramaswamy's data set – that is, the data set from which Ramaswamy extracts outliers. De Boor discloses no such thing. For at least the additional reason that De Boor fails to teach or suggest formatting a synopsis of said large data set in a synopsis container that includes both the large data set and the synopsis thereof, the § 103 rejections of claims 1, 10, and 15 must be withdrawn.

The Examiner stated, "De Boor teaches the claimed, transmitting synopsis container to a computer having an accessibility system," citing to col. 30, lines 18-21. That passage is a critique of prior art methods of breaking a form into multiple parts, so that a large form is not effectively lost on the small display screen of a cell phone. The paragraph discloses the bandwidth intensive method of sending portions of the form from a server to the cell phone, and data from the cell phone to a server. Nothing about the multi-part form discloses or suggests that it would comprise a large data set and additionally a synopsis of the data set, as the synopsis container is defined to include. Indeed, the cited passage teaches away from such, as the very idea is to avoid sending a large data set all at once – rather, large forms are divided into parts, and each part transmitted between the server and cell phone separately. Claims 1 and 15 recite transmitting both a full data set and a synopsis of it in a synopsis container – that is, the synopsis container is larger than the data set. The cited passage of De Boors teaches the opposite – dividing a form into parts and separately transmitting each part.

Furthermore, nothing in any of De Boor's disclosure teaches or suggests that the server has an accessibility system, such as a screen reader, as defined in Applicant's specification at paragraph 0023. For at least the reason that De Boor fails to teach or suggest transmitting a synopsis container to a computer having an accessibility system, the § 103 rejections of claims 1, and 15 must be withdrawn.

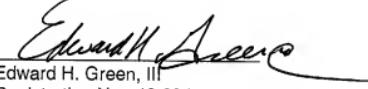
Regarding the § 103 rejection of claim 10, as discussed above, Ramaswamy does not disclose or suggest "at least one attribute comprising a synopsis of said large data set;" Ramaswamy discloses only a method of extracting abnormal, dissimilar data points from a large data set. As also discussed above, De Boor fails to disclose or suggest "a markup language data structure containing said large data set;" De Boor discloses extensions to a markup language that implement a telephony user interface on a cell phone. Furthermore, neither Ramaswamy nor De Boor, separately or in combination, teach or suggest encapsulating both the large data set (in a markup language) and a synopsis thereof within a markup language data structure (that is, between an initial and terminating tag). For at least the reason that the combination of Ramaswamy and De Boor fails to teach or suggest all claim limitations, the § 103 rejections of claim 10 must be withdrawn.

The further combination of Ramaswamy and/or De Boor with other references does not cure the deficiency of the primary combination to teach or suggest all claim limitations. Since all dependent claims include all limitations of their respective parent claims, dependent claims 2-9, 11-14, and 16 are additionally patentably nonobvious over the art of record.

Prompt allowance of all pending claims is therefore respectfully request.

Respectfully submitted,

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